

Notice of Allowability

Application No.

09/771,115

Applicant(s)

SHROPSHIRE, ARTHUR
EDWARD

Examiner

Fred Ferris

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5 April 2006.
2. ☒ The allowed claim(s) is/are 1 and 3-25.
3. ☒ The drawings filed on 26 January 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 04/25/06
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

1. *This office action is responsive to applicant's amendment filed 5 April 2006. Applicants have now cancelled claim 2. Amended claims 1, and 3-16 have now been allowed over the prior art of record. Claims 17-25 were previously been allowed over the prior art of record. The case is therefore now in condition for allowance.*

Response to Arguments

2. *Applicant's arguments filed 5 April 2006, with respect to claims 1, and 3-16 have been fully considered and are persuasive. The 103(a) rejection of claims 1, and 3-16 have been withdrawn in view of applicant's amendment to claim 1.*

Allowable Subject Matter

4. *Claims 1, and 3-25 have been allowed over the prior art of record.*

The following is an examiners statement of reasons for allowance:

Applicants are disclosing a computer based system for creating a wiring harness design where module data is created for harness modules representing wire and component elements based on various options so that the modules can be assembled by selected (optional) combinations to create a complete harness. These features are generally disclosed in the prior art. However, the prior art of record, while generally disclosing these features, does not meet the conditions as suggested in MPEP section 2132, namely:

*"The identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an **ipsissimis verbis** test, i.e., identity of terminology is not required. **In re Bond**, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990)."*

In this case, the prior art of record does not disclose the specific arrangement of elements relating to a virtual parent harness representation of all modules available for designing the physical harness, association by permissible relationship between modules as defined by applicant's specification (pp. 10-18, tables 1-3) represented as a virtual parent harness including modules available for harness design and a core module in the physical harness of only one core module corresponding to the modular wiring harness design, as disclosed within the context of independent claims 1, 17, and 19.

The closest prior art of record uncovered during examination discloses various techniques for wiring harness design. For example:

- U.S. Patent 6,457,165 issued to Ishikawa et al discloses a wiring harness design system that creates and stores design data of relative harness elements including the relationship between modules with automatic harness calculations and verification. Ishikawa does not explicitly disclose a virtual parent harness representation of all modules available for designing the physical harness, association by permissible relationship between modules as defined by applicant's specification (pp. 10-18, tables

1-3), or a virtual parent harness representation and core module in the physical harness of only one core module corresponding to the modular wiring harness design.

- "Wiring Harness Design can a Computer Help?" R. Billsdon, Computing and Control Engineering Journal, IEEE, August 1998 discloses Raychem Corporation's HarnWare computer-aided wiring harness design system which includes, a library of intelligent harness drawing shapes (i.e. core harnesses), automatic on screen tracing of point-to-point wire routes, harness geometry and wire lengths calculation, and best positioning. However, Billsdon also does not explicitly disclose a virtual parent harness representation of all modules available for designing the physical harness, association by permissible relationship between modules as defined by applicant's specification (pp. 10-18, tables 1-3), or a virtual parent harness representation and core module in the physical harness of only one core module corresponding to the modular wiring harness design.

Dependent claims 3-16, 18, and 20-25 are deemed allowable as being dependent from independent claims 1, 17, and 19 respectively.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 571-272-3778 and whose normal working hours are 8:30am to 5:00pm Monday to Friday. Any inquiry of a general nature relating to the status of this application should be directed to the group receptionist whose telephone number is 571-272-3700. If attempts to reach the

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examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached at 571-272-3780. The Official Fax Number is: (703) 872-9306

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